



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/583,583	10/23/2000	Mathieu Vandebossche	1200-370	2518

7590 03/01/2004

Matthew W Stavish  
Liniak Berenato Longacre & White  
6550 Rock Spring Drive  
Suite 240  
Bethesda, MD 20817

EXAMINER
----------

AGUIRRECHEA, JAYDI A

ART UNIT	PAPER NUMBER
----------	--------------

2834

DATE MAILED: 03/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/583,583

Applicant(s)

VANDENBOSSCHE, MATHIEU

Examiner

Jaydi A. Aguirrechea

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,4-11 and 13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4-9,11 and 13 is/are rejected.
- 7) ☒ Claim(s) 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

1. Objection to the drawings is hereby withdrawn.

### ***Specification***

2. Objection to the specification is hereby withdrawn.

### ***Claim Rejections - 35 USC § 112***

3. Rejection under 35 USC 112 is hereby withdrawn.

### ***Response to Arguments***

4. Applicant's arguments, see "Remarks" page 6, paragraph 4, filed 11/19/03, with respect to the rejection(s) of claim(s) 3 under 35 USC 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Oohashi et al. (US 6172434).

5. In response to applicant's argument that Komurasaki et al. fails to disclose the insulating support having an opening, it is the Examiner's position that Komurasaki discloses an opening, for example in figure 2. Even though the component 51 is closed it does show an opening.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 4-7, 9, 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Komurasaki et al (US 5619108) in view of Oohashi et al. (US 6172434).

Art Unit: 2834

Referring to claim 1, Komurasaki et al. disclose a brush holder (12) for a vehicle alternator having a housing (2), the brush holder (12) comprising: an insulating support (51) having an opening (Figure 2), heat dissipating means (24,58) having a metallic seat (58) fixed to the support (51); and an electrical circuit (59) comprising: a semiconductor control component, in which the seat (58) on the one hand receives for fixing on one of its faces the control component (59) by means of an opening in the support (51) and on the other hand belongs to the heat dissipation means (24,58) in contact with an ambient environment and arranged so as to receive heat from the control component (59), wherein the seat (58) is separate from the housing (2) and not in contact with the housing (2), the seat (58) is mounted within a thickness of the support (51) and the seat (58) receives on the other of its faces a heat dissipator (24) so that the heat dissipation means (24,28) is composed of two distinct and adjacent parts (Figure 1).

However, Komurasaki is silent regarding the material the dissipator is made of and/or the coefficient of expansion of the heat dissipating means.

Oohashi discloses the use of a heat sink made of aluminum. Oohashi discloses that the heat sink 26 is composed of aluminum, which has high thermal conductivity. It would have been obvious at the time of the invention was made to use an aluminum heat sink (aluminum having a higher coefficient of expansion than the copper used in the seat) since the aluminum has a high thermal conductivity.

8. Referring to claim 4, Komurasaki et al. disclose that the support (51) is molded onto the seat (58).

Art Unit: 2834

9. Referring to claim 5, Komurasaki et al. disclose that the support (51) is molded onto the dissipator (24). Referring to claim 6, Komurasaki et al. disclose that the dissipator (24) is attached to the support (51).

10. Referring to claim 7, Komurasaki et al. disclose that the dissipator (24) is fixed to the support (51) by screws (56).

11. Referring to claim 9, Komurasaki et al. disclose that the seat (58) and the dissipator (24) are in direct contact.

12. Referring to claim 11, Komurasaki et al. disclose that the dissipator (24) is metallic.

13. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Komurasaki in view of Nakata et al (US 4990811).

14. Komurasaki et al. disclose a brush holder as described on item 1 above. However, Komurasaki et al. do not disclose that a thermally insulating element is interposed between the/or each screw and the dissipator.

15. Nakata et al. disclose that a thermally insulating element (36) is interposed between each screw (34) and the dissipator (18). The invention of Nakata et al. has the purpose of securing an insulator plate to a bracket through fixing legs. It would have been obvious at the time the invention was made to modify the brush holder of Komurasaki et al. and provide it with the thermally insulating element disclosed by Nakata et al, for the purpose of securing an insulator plate to a bracket through fixing legs.

Art Unit: 2834

*Allowable Subject Matter*

16. Claim 10 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

17. The references of the Prior Art of Record fail to teach or suggest either alone or in obvious combination the limitations as set forth in claims 1 and 10, and specifically comprising the limitation of the dissipator having projecting relieves able to enter the material of the other dissipator.

*Conclusion*

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.


Art Unit: 2834

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jaydi A. Aguirrechea whose telephone number 571-272-2018.

The examiner can normally be reached on M-Th 9-7.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Burton S. Mullins can be reached on 703-305-7063. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

JAA  
1/31/04

  
BURTON S. MULLINS  
PRIMARY EXAMINER